APPENDIX B
GLOSSARY OF TERMS

ACCEPTANCE — The act of an authorized representative of the government by which the government assumes for itself, or as agent of another, ownership of existing and identified supplies tendered or approves specific services rendered, as partial or complete performance of the contract on the part of the contractor.

ACQUISITION PLAN — A document which records program decisions, contains the requirement, provides appropriate analysis of technical options and the life cycle plans for development, production, training and support of materiel items.

ACTUAL COST — The sum of the allowable direct and indirect costs (allocable) incurred as a result of producing a part, product, or service.

ACTUAL TIME — The time taken by a worker to complete a task or an element of a task.

ADVANCE BUY DOLLARS — The time lapse between ordering key defense components and their delivery (lead time) has increased dramatically in recent years. The direct effect of this is that obligation authority, to finance long lead items in advance of the end item buy year, is required earlier and in greater amounts. This obligation authority is normally referred to as “advance buy dollars.”

ADVANCE BUY FUNDING — Advance buy funding is funding obligated/expended to procure long lead material/components in advance of the fiscal year in which the related procurement action is initiated.

ADVANCED DEVELOPMENT — Includes all projects which have moved into the development of hardware for experimental or operational test.

ADVANCED ENGINEERING MODEL — A prototype.

ALLOCATED CONFIGURATION IDENTIFICATION (ACI) — Currently approved performance oriented specifications governing the development of configuration items that are a part of a higher level configuration item (CI) in which each specification; 1) defines the functional characteristics that are allocated from those of the higher level CI, 2) establishes the tests required to demonstrate achievement of its allocated functional characteristics, 3) delineates necessary interface requirements with other CIs, and 4) establishes design constraints, if any, such as component/part standardization, use of inventory items and integrated logistic support requirements.

ALLOWANCE — A time increment included in the standard time for an operation to compensate the worker for production lost due to fatigue and normally expected interruptions, such as personal and unavoidable delays. It is usually applied as a percentage of the normal or leveled time.

ANALYSIS OF MANUFACTURING OPERATIONS — The review and evaluation of assembly and fabrication processes to determine how effectively and efficiently the contractor’s manufacturing operations have been planned or accomplished.

ASSEMBLY — Two or more parts or subassemblies joined together to form a complete unit, structure, or other article.

ASSEMBLY CHART — Portrays the proposed sequence of assembly operations constituting the assembly process in the production of goods that are composed of many components.

ASSESSMENT REPORT — The report generated by an independent assessment of a major system during any phase of the acquisition and support process to provide an examination and evaluation of technical requirements, status toward achievement of those requirements, identify problems and problem causes and make recommendations for correction of the problems or to improve either the requirements or the actions to achieve the requirements.

ATTRITION — The loss of a resource due to natural causes in the normal course of events such as a turnover of employees or spoilage and obsolescence of material.

AVAILABILITY — A measure of the degree to which an item is in the operable and committable state at the start of the mission, when the mission is called for at an unknown (random) point in time (MIL-STD-721).

AVOIDABLE DELAY — Any time during an assigned work period which is within the control of the worker for idle time or for doing things unnecessary to the performance of the operation. Such time does not include allowance for personal requirements, fatigue, and unavoidable delays.

BALANCED LINE — A series of progressive related operations with approximately equal standard times for each, arranged so that work flows at a steady rate from one operation to the next.

BANK — A planned accumulation of work-in-process to permit reasonable fluctuations in performance times of coordinated or associated operations.

BARCHART — The detailed graphical working plan of a part providing sequence and time for the job scheduled ahead and progress to date.

BASELINE COST ESTIMATE (BCE) — A document which provides a detailed estimate of acquisition and ownership costs.

BRASSBOARD — An experimental device used to determine feasibility and to develop technical and operational data, sufficiently hardened for use outside the laboratory for use in demonstrating the technical and operational principles of immediate interest.

BREADBOARD — An experimental device used to determine feasibility and to develop technical data, normally only configured for laboratory use to demonstrate the technical principles of immediate interest.

BUDGET — A planned program for fiscal periods in terms of estimated costs, obligations, expenditures, source of funds for financing, reimbursements anticipated and other resources to be applied.

BUDGETING — The process of translating approved resource requirements into time-phased financial requirements.

CALIBRATION — The comparison of a measurement system or device of unverified accuracy to a measurement system or device of known or greater accuracy to detect and correct any variation from required performance specifications of the unverified measurement system or device.

CAPACITY ANALYSIS — An analysis most frequently employed in a machine or process area to project the ability to absorb additional business.

CONCEPT DEMONSTRATION/VALIDATION — The period when major program characteristics are refined through extensive study and analysis, hardware development, test and evaluations. The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into full-scale development.

CONCEPT DEVELOPMENT — The initial period when the technical, military, and economic bases for acquisi-

tion programs are established through comprehensive studies and experimental hardware development and evaluation. The outputs are alternative concepts and their characteristics (estimated operational, schedule, procurement, costs, and support parameters) which serve as inputs to the System Concept Paper (SCP) on major systems, Program Memoranda (PM) on smaller systems/equipment, and to Service decision documents (Program Management Directives) for programs that do not require OSD decisions.

CONCURRENT ENGINEERING — A method for integrating and design manufacturing.

CONFIGURATION — The functional and/or physical characteristics of hardware/ computer programs as set forth in technical documentation and achieved in the product.

CONFIGURATION ITEM (CI) — An aggregation of hardware/computer programs or any of its discrete portions which satisfies an end use function and is designated by the government for configuration management.

CONFIGURATION MANAGEMENT — A discipline applying technical and administrative direction and surveillance to; 1) identify and document the functional and physical characteristics of a configuration item, 2) control changes to those characteristics, and 3) record and report change processing and implementation status.

CONTRACTOR-ACQUIRED PROPERTY (CAP) — Property procured or otherwise provided by the contractor for the performance of a contract, title to which is vested in the government.

CONVERGENCE POINT — The value (on the X-axis) where the experience curve crosses the horizontal line representing the labor standard. The point in time (unit number) when workers, on a learning curve, attain standard performance.

COOPERATIVE DEVELOPMENT — Cooperative development includes any method by which governments cooperate to make better use of their collective research and development resources to include technical information exchange, harmonizing of requirements, codevelopment, interdependent research and development, and agreement on standards. Many of these elements occur prior to appointment of the program manager or occur outside the program management environment, but their results impact programs which have multinational involvement.

COST ACCOUNTING — A system of methods and records which organizes and displays the actual costs associated with a given production contract.

COST ANALYSIS IMPROVEMENT GROUP (CAIG) — An advisory body established to advise the DAB on all matters concerning the estimation, review and presentation of cost analysis of future weapon systems.

COST CENTER — Any subdivision of an organization comprised of workers, equipment areas, activities, or combination of these that is established for the purpose of assigning or allocating costs. Cost centers are also used as a base for performance standards. Synonym: burden center, cost pool.

COST ESTIMATING RELATIONSHIP (CER) — The curve of a cost function which relates the cost of a product to some measurable characteristic of its physical characteristics or manufacture and from which extrapolations and interpolations may be extracted for estimating purposes.

COULD COST — A cooperative government and industry process of eliminating all non-essential (labor, material and other)costs while ensuring at the same time product performance and quality.

CREW LOAD — The number of workers assigned to complete the work on a defined production component.

CRITICAL DESIGN REVIEW (CDR) — Determines that the detail design satisfies the performance and engineering specialty requirements of the development specification; establishes the detail design compatibility among the item and other items of equipment facilities, computer programs and personnel; assesses producibility and risk

areas and reviews the preliminary product specifications.

CRITICAL ITEMS LIST (CIL) — A prioritized list of end items and weapon systems which are essential to sustained combat operations. This list serves as the basis for development of the Industrial Preparedness Planning List, and is used as a guide for allocation of resources.

CRITICAL MATERIAL — A material that has been classified as being essential to our economy. There are approximately 40 minerals in this category and the U.S. is more than 50 percent dependent on foreign sources for over half of these.

CRITICAL WEAKNESS RELIABILITY TEST — This test determines the mode of failure when equipment is exposed to environments in excess of the anticipated environments. By this testing, critical levels can be determined from vibration, temperature voltage, cycles, etc., which will adversely affect the component. In subsequent tests of the total system in which a stress level exceeds the expected limits, an evaluation of the critical weakness tests will provide excellent insight as to what may have been damaged or what can be expected to fail.

CUTTING SPEED — The relative velocity, usually expressed in feet per minute, between a cutting tool and the surface of the material from which it is removing stock. Synonym: cutting rate.

CYCLE — Time required to complete a predetermined number of article(s) of production.

DEFENSE ACQUISITION BOARD (DAB) — An advisory group established by and functioning for the SECDEF to appraise the SECDEF of the program status and readiness of each major defense system to proceed to the next phase in the acquisition process.

DEFENSE ACQUISITION EXECUTIVE (DAE) — The principal advisor and staff assistant to the SECDEF and the focal point in OSD for system acquisitions.

DEFENSE CONTRACTOR PLANNING REPORT WEIGHT — The empty weight of the airplane less; 1) wheels, brakes, tires and tubes, 2) engines, 3) starter, 4) cooling fluid, 5) rubber or nylon fuel cells, 6) instruments, 7)batteries and electric power supply and conversion equipment, 8)electronic equipment, 9) turret mechanism and power operated gunmounts, 10) remote fire mechanism and sighting and scanning equipment, 11) air conditioning units and fluid, 12) auxiliary power plant unit, and 13) trapped fuel and oil.

DEFENSE SYSTEM — See Weapon System

DELAY ALLOWANCE — A time increment included in a time standard to allow for predictable contingencies and minor delays beyond the control of the workers.

DESIGN TO COST (DTC) — A process utilizing unit cost goals as thresholds for managers and design parameters for engineers normally in terms of a single cumulative “average flyaway cost. “This cost represents what the government has determined it can afford to pay for a unit of military equipment which meets established and measurable performance requirements at a specified production quantity and rate during a specified period of time.

DESIGN TO COST GOAL — A specific cost established as a goal for a specific configuration, established performance characteristics and a specific number of systems at a defined production rate.

DEVELOPMENTAL TESTING AND EVALUATION (DT&E) — DT&E is conducted to demonstrate that the engineering design and development process is complete and that the design risks have been minimized, that the system will meet specifications and that the system’s military utility when introduced to operating units is estimated.

DIRECT COST — Those costs which can be traced directly to a specific piece-part, subassembly or product.

DIRECT ENGINEERING — Engineering effort directly traceable to the design, manufacture, or control of specific end products.

DIRECT LABOR STANDARD — A specified output or a time allowance established for a direct labor operation.

DIRECT MANUFACTURING LABOR — Work which alters the composition, condition, conformation, or construction of the product; the cost of which can be identified with and assessed against a particular part, product, or group of parts or products accurately and without undue effort and expense; colloquially called “direct labor.”

DIRECT MATERIAL — All material that enter into and becomes part of the finished product (including waste) the cost of which can be identified with and assessed against a particular part ,product, or group of parts or products accurately and without undue effort and expense.

DOD COMPONENTS — The Military Departments, the Defense Agencies the Organization of the JCS, and the OSD and activities administratively supported by OSD.

EARNED HOURS — The time in standard hours credited to a worker or group of workers as a result of their completion of a given task or group of tasks.

ECONOMIC LOT SIZE — That number of units of material or a manufactured item that can be purchased or produced within the lowest unit cost range. Its determination involves reconciling the decreasing trend in preparation unit costs and the increasing trend in unit costs of storage, interest, insurance, depreciation, and other costs incident to ownership, as the size of the lot is increased.

ECONOMIC ORDER QUANTITY (EOQ) — EOQ is the most economical quantity of parts to order at one time to support a defined production rate considering the applicable procurement and inventory costs.

EFFICIENCY FACTOR — The ratio of standard performance time to actual performance time, usually expressed as a percentage.

ENGINEERING DEVELOPMENT — Includes those development programs being engineered for service use but which have not yet been approved for procurement or operation.

EQUIPMENT — A major subdivision of a weapon system or subsystem that performs a function impacting the operational capability and readiness of the weapon system/subsystem. It is grouped into two general categories, that is, mission equipment and support equipment. Equipment does not denote bit part pieces or components elements that comprise an equipment entity.

EQUIPMENT SCHEDULING AND LOADING — The effective and efficient loading of machines according to their capabilities to perform defined operations utilizing their maximum capability to assure attainment of the manufacturing schedule.

EXPLORATORY DEVELOPMENT — Includes all effort toward the solution of specific military problems, short of major development projects.

FABRICATION — The construction of a part from raw material.

FACILITIES — Industrial Property (other than material, special tooling, military property, and special test equipment for production, maintenance, research, development, or test) including real property and rights therein, buildings, structures, improvements and plant equipment.

FAILURE — The event in which any part of an item does not perform as required by its performance specification.

FATIGUE — A physical and/or mental weariness, real or imaginary, existing in a person, adversely affecting the

ability to perform work.

FATIGUE ALLOWANCE — Time included in the production standard to allow for decreases or losses in production which might be attributed to fatigue (usually applied as a percentage of the leveled, normal, or adjusted time.)

FINAL ASSEMBLY — The joining together of the major sections to perform a complete unit.

FIVE-YEAR DEFENSE PROGRAM (FYDP) — The publication that records, summarizes and displays the decisions that have been approved by the SECDEF as constituting the DOD program.

FIXED COST — Those costs which remain relatively constant irrespective of volume.

FLOW DIAGRAM — The paths of movement of workers and/or materials superimposed on a graphical representation of a work area.

FLOW PROCESS CHART — A graphic representation of the sequence of all operations, transportations, inspections, delays, and storages occurring during a process or procedure.

FLOW TIME — The time required for a defined amount of work to be completed.

FOLLOW-ON OPERATIONAL TEST AND EVALUATION (FOT&E) — That T&E which is necessary during and after the production period to refine the estimates made during the IOT&E, to evaluate changes, and to reevaluate the system to ensure that it continues to meet operational needs and retains its effectiveness in a new environment or against a new threat.

FOREIGN MILITARY SALES (FMS) — An FMS agreement is the document by which the U.S. Government agrees to sell defense articles and services to a foreign government or international organization.

FULL FUNDING POLICY — This general policy prescribes that the annual appropriation of funds for the total estimated costs to be incurred in the delivery of a given quantity of a usable end item are to be available in the fiscal year in which the procurement action is initiated for that end item.

FULL-SCALE DEVELOPMENT PHASE — The period when the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. the intended output is, as a minimum, a preproduction system which closely approximates the final product, the documentation necessary to enter the production phase, and the test results which demonstrate that the production product will meet stated requirements.

FUNCTIONAL CONFIGURATION AUDIT (FCA) — The formal examination of functional characteristics test data for configuration item, prior to acceptance, to verify that the item has achieved the performance specified in its functional or allocated configuration identification.

FUNCTIONAL CONFIGURATION IDENTIFICATION (FCI) — The current approved or conditionally approved technical documentation for a configuration item as set forth in specification, drawing and associated lists and documents referenced therein which prescribes; 1) all the necessary functional characteristics, 2) the tests required to demonstrate the achievement of specified functional characteristics, 3) the necessary interface characteristics with associated configuration items (CIs), 4)CI's key functional characteristics and its key lower level CIs,if any, and 5) design component standardization, use of inventory items and integrated logistic support policies.

GANTT CHART — A graphic representation of a time scale of the current relationship between actual and planned performance.

GENERAL AND ADMINISTRATIVE (G&A) COSTS — An overhead cost category for accumulation of such costs as personnel department, accounting, purchasing, etc.

GOVERNMENT ACQUISITION QUALITY ASSURANCE — The function by which the government determines whether a contractor has fulfilled his contract obligations pertaining to quality and quantity.

GOVERNMENT-FURNISHED MATERIAL (GFM) — Government property which may be incorporated into or attached to an end item to be delivered under a contract or which may be consumed in the performance of a contract. It includes, but is not limited to; raw and processed material, parts, components, assemblies, and small tools and supplies.

GOVERNMENT-FURNISHED PROPERTY (GFP) — Property in the possession of or acquired directly by the government, and subsequently delivered to or otherwise made available to the prime contractor.

IDLE TIME — A time interval during which either the workman, the equipment, or both do not perform useful work.

IN-PROCESS INVENTORY CONTROL — The process whereby materials and parts are planned and controlled to assure their availability at the required stage of production.

INDUSTRIAL FACILITIES — Industrial property (other than material, special tooling, military property, and special test equipment) for production, maintenance, research and development, or test, including real property and rights therein, buildings, structures, improvements, and plant equipment.

INDUSTRIAL MODERNIZATION INCENTIVES PROGRAM (IMIP) — A partnership between DOD agencies and their prime contractors to stimulate industry capital investments implementation of advanced manufacturing technologies, and productivity.

INDUSTRIAL PLANT EQUIPMENT (IPE) — That part of planned equipment, exceeding defined acquisition cost thresholds, used for the purpose of cutting, abrading, grinding, shaping, forming, joining, testing, measuring, heating, treating, or otherwise altering the physical, electrical or chemical properties of materials, components or end items, entailed in manufacturing, maintenance, supply, processing, assembly, or research and development operations.

INDUSTRIAL PREPAREDNESS (IP) — The state of preparedness of industry to simultaneously produce essential materiel and support the sustained operational requirements of U.S. and approved Allied Forces.

INDUSTRIAL PREPAREDNESS PROGRAM (IPP) — A coordinated system of plans, actions, and measures for the transformation of the industrial base, both government-owned and civilian-owned, from its peacetime activity to the emergency program necessary to support the national military objectives. It includes industrial preparedness measures such as modernization, expansion, and preservation of industrial facilities.

INHERENT R&M VALUE — Any measure of reliability or maintainability that includes only the effects of item design and installation, and assumes an ideal operating and support environment.

INTEGRATED LOGISTICS SUPPORT (ILS) — A composite of all support considerations necessary to assure the effective and economical support of a system for its life cycle.

INITIAL OPERATIONAL TESTING AND EVALUATION (IOT&E) — That T&E performed during a development program intended for acquisition.

INSPECTION — The examination and testing of supplies and services (including, when appropriate, raw materials, components, and intermediate assemblies) to determine whether they conform to specified requirements.

INTERFERENCE TIME — A period of time during which one or more machines are not operating because the worker or workers assigned to operate them are busy operating other machines in their assignment or are perform-

ing necessary duties related to operating machines such as making repairs, cleaning the machines, or inspecting completed work.

JIG — A device which holds components in a required position for assembly and guides the equipment which performs the necessary operations.

JOB — A group of contiguous operations related by similarity of functions that can be completed by one or more workers without interference or delay.

JOB ANALYSIS — A detailed examination of a job to determine the duties, responsibilities and specialized requirements necessary for its performance.

JOB LOT — A relatively small number of a specific type of part or product that is produced at one time. The part or product maybe a standard item that has been and will again be produced, or it may be a special item destined for a specific customer who has not ordered it before and may not order it again.

JOB ORDER COST SYSTEM — Direct and overhead cost data are accumulated by each contract or order.

JOB SHOP — A manufacturing enterprise devoted to producing special or custom made parts or products usually in small quantities for specific customers.

KAIZEN — A Japanese term for continuous improvement. When properly applied, companies experience significant importance in quality, increased productivity and ultimately, greater profits, without the expense associated with innovation.

LABOR PRODUCTIVITY — The rate of output of a worker or group of workers per unit of time, compared to an established standard or expected rate of output.

LABOR STANDARDS — A compilation of standard time for each element of a given type of work. Once element standards have been established, the standards are applied to work containing similar elements without making actual time studies of the work.

LEARNING CURVE — The learning, or manufacturing improvement, curve is a quantitative technique used to predict resource requirements in a manufacturing operation. The primary application has been the prediction of the direct manufacturing hours required to produce a known quantity of a specific product.

LEVELED TIME — The average time adjusted to account for the difference in operator performance; such as skill, effort and conditions.

LIFE CYCLE COST (LCC) — The Life Cycle Cost of a system is the total cost to the government of acquisition and ownership of that system over its full life. It includes the cost of development, acquisition, support and, where applicable, disposal.

LIFE UNITS — A measure of use duration applicable to the item (such as, operating hours, cycles, distance, rounds fired, attempts to operate).

LINE OF BALANCE (LOB) — A graphic display of scheduled units versus actual units over a given set of critical schedule control points on a particular day.
LINE PRODUCTION — A method of plant layout in which the machines and other equipment required, regardless of the operations they perform, are arranged in the order in which they are used in the process (layout by product).

LINE STOCK — Parts or components (for example, screws, washers, solder, common resistors, etc.) which are physically identifiable with the product, but which are of very low value, and therefore, do not warrant the usual

item-by-item costing techniques.

LONG LEAD MATERIAL — Long lead materials are those material items or components whose lead times are significantly longer than other material items/components of the same end item.

LOT — Order quantity released for production.

LOT ACCEPTANCE TEST — This test is based on a sampling procedure to assure that the product retains its quality. A specified number of items from each lot or group are withdrawn, at random, and tested to establish that the functions, tolerances, and materials have not been degraded. No acceptance or installation should be permitted until this test for the lot has been successfully completed.

LOW RATE INITIAL PRODUCTION (LRIP) — A term describing a low rate of output at the beginning of production to reduce the government's exposure to large retrofit programs and costs.

M-DAY — Term used to designate the day on which mobilization is to begin.

MACHINE CONTROLLED TIME — That part of a work cycle that is entirely controlled by a machine and, therefore, is not influenced by the skill or effort of the worker.

MACHINE ELEMENT — A work cycle subdivision that is distinct, describable and measurable, the time for which is entirely controlled by a machine, and, therefore, not influenced by the skill or effort of the worker.

MAINTAINABILITY — The ability of an item to be retained in or restored to specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair.

MAJOR ASSEMBLY — An operation in the construction of a section which joins a number of subassemblies.

MAKE OR BUY — Analysis performed by a contractor to determine whether an item should be made "in house" or purchased from an outside supplier.

MANPOWER SCHEDULING AND LOADING — The effective and efficient utilization and scheduling of available manpower according to their skills to ensure that required manufacturing operations are properly coordinated and executed.

MANTECH (MANUFACTURING TECHNOLOGY) — Manufacturing Technology refers to any action which has as its objective, 1) the timely establishment or improvement of the manufacturing processes, techniques, or equipment required to support current and projected programs, and 2) the assurance of the ability to produce, reduce lead time, ensure economic availability of end items, reduce costs, increase efficiency, improve reliability, or to enhance safety and anti-pollution measures.

MANUAL ELEMENT — A distinct, describable, and measurable subdivision of a work cycle or operation performed by one or more human motions that are not controlled by process or machine.

MANUFACTURING ENGINEERING — Preproduction planning and operation analysis applied to specific projects. Other similar functions include sustaining (on-going) engineering, production engineering, and production planning.

MANUFACTURING MANAGEMENT PRODUCTION/CAPABILITY REVIEW — A review accomplished by the program office during source selection to determine each competing contractor's existing and planned manufacturing management system and production capability/ capacity to meet all known production requirements of the proposed system considering all current firm and projected business.

MANUFACTURING OVERHEAD — A form of indirect costs — accumulated manufacturing costs prorated over all products in process, generally as a percent of direct labor and/or material.

MATERIAL — Property which may be incorporated into or attached to an end item to be delivered under a contract or which may be consumed or expended in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies, fuels and lubricants and small tool and supplies which may be consumed in normal use in the performance of a contract.
METHODS ENGINEERING — The technique that subjects each operation of a given piece of work to close analysis in order to eliminate every unnecessary element or operation and in order to approach the quickest and best method of performing each necessary element or operation. It includes the improvement and standardization of methods, equipment, and working conditions; operator training; the determination of standard times; and occasionally devising and administering various incentive plans.

METHODS STUDY — Systematic recording of all activities performed in a job or position of work including standard times for the work performed. Work simplification notes are written during the study.

METROLOGY — The science of weights and measures used to determine conformance to technical requirements including the development of standards and systems for absolute and relative measurements.

MILITARY PROPERTY — Military property is government-owned property designed for military operations. It includes end items and integral components of military weapons systems, along with the related peculiar support equipment which is not readily available as a commercial item. It does not include government material, special test equipment, special tooling or facilities.

MINIMUM BUY — The purchase of material in standard bulk quantities even though the contract requirement is less than the standard quantity. This is done when price does not increase proportionately for quantities less than the standard quantity.

MISSION AREA ANALYSIS (MAA) — Continuous analysis of assigned mission responsibilities in the several mission areas to identify deficiencies in the current and projected capabilities to meet essential mission needs and to identify opportunities for the enhancement of capability through more effective systems and less costly methods.
MISSION EQUIPMENT (ME) — Any item which is a functional part of a system or subsystem and is required to perform mission operations.

MOBILIZATION — The act of preparing for war or other emergencies through assemblying and organizing national resources; and the process by which the Armed Forces or part of them, are brought to a state of readiness for war or other national emergency. This includes assembling and organizing personnel, supplies, and material for active military service.

MULTI-YEAR PROCUREMENT (MYP) — A procurement of more units of product than can be funded by the government in a single year. The total purchase is divided into annual segments which are negotiated at one time. Under multi-year conditions, the government pays lower unit prices due to
larger buys; however, the contractor is protected from annual cancellations through clauses in the contract.

NATIONAL EMERGENCY — A condition declared by the President or Congress by virtue of powers previously vested in them which authorizes certain emergency actions to be undertaken in the national interest. Actions to be taken may include partial or total mobilization of national resources.

NONRECURRING — A descriptive term applied to a type of work, operation, part, or the like that does not recur frequently or in any reasonable regular sequence (also nonrepetitive).

NORMAL PACE — The work rate usually used by workers performing under capable supervision but without the stimulus of an incentive wage payment plan. This pace can easily be maintained day in and day out without undue physical or mental fatigue and is characterized by the fairly steady exertion of reasonable effort.

NUMERICAL CONTROL (NC) — Tape controlled machine operation which provides high repeatability for multiple process steps.

OPERATION — The intentional changing of an object in any of its physical or chemical characteristics; the assembly or disassembly of parts or objects; the preparation of an object for another operation, transportation, inspection or storage; planning, calculating, or the giving or receiving of information.

OPERATION PROCESS CHART — Identifies the successive operations, in their required sequence, for producing a product.

OPERATIONAL R&M VALUE — Any measure of reliability or maintainability that includes the combined effects of item design, quality, installation, environment, operation, maintenance, and repair.

OPERATIONAL TEST AND EVALUATION (OT&E) — T&E participated in or performed by operational personnel focusing on operational effectiveness and suitability.

OTHER PLANT EQUIPMENT (OPE) — That part of plant equipment, regardless of dollar value, which is used in or in conjunction with the manufacture of components or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as industrial plant equipment.
OUTPUT STANDARD — Specifies the number of items or amount of services that should be produced in a specific amount of time by a specific method.

PERSONAL ALLOWANCE — Time included in the production standard to permit the worker to attend the personal necessities such as obtaining drinks of water, making trips to the restroom, and the like. Usually applied as a percentage of the leveled, normal, or adjusted time.

PERT — PERT (Program Evaluation and Review Technique) is a management tool applied to planning complex and high priority research and development programs.

PHYSICAL CONFIGURATION AUDIT (PCA) — A technical examination of a designated configuration item to verify that the item “as built” conforms to the technical documentation which defines the item.

PILOT PRODUCTION — The controlled manufacture of limited numbers of an item for service T&E purposes using manufacturing drawings and specifications which have been developed for quantity production and with tooling that is representative of that to be used in unlimited production.

PLANNED PRODUCER — An industrial firm/activity which has indicated its willingness to produce military items during a surge or mobilization under industrial preparedness planning procedures by consummating a production planning schedule.

PLANNING ITEM — Any item/critical component selected for industrial preparedness planning. Critical components of any Industrial Preparedness Planning List (IPPL) end item, which are not separately planned or listed in the IPPL, are considered planning items when they meet all of the following criteria: 1)components are produced in the same plant as the end item which is listed in the IPPL, 2) a list of these components is included as a part of the approved planning data (DID, DD 1519, Sector Study), and 3) the components have been validated by the designated ASPPO and/or acquisition activity as critical for end item production capability.

PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS) — An integrated system for the establishment, maintenance and revision of the FYDP and the DOD budget.

PREAWARD SURVEY — A review accomplished by the Contract Administrative Office of a prospective contractor’s physical, financial and managerial capability to accomplish the work included in a specific contract effort.

PRELIMINARY DESIGN REVIEW (PDR) — Conducted on each configuration item to evaluate the progress, technical adequacy and risk resolution of the selected design approach, determine its compatibility with performance and engineering specialty requirements of the development specification and establish the existence and compatibility of the physical and functional interfaces among the item and other items of equipment, facilities, computer programs and personnel.

PREPRODUCTION MODEL — An article in final form employing standard parts, representative of articles to be produced subsequently in a production line.

PREPRODUCTION TEST — This is a test of design qualified hardware that is produced using production tooling and processes which will be used to produce the operational hardware. No production hardware should be accepted prior to satisfactory completion of this test. Test objectives include gaining confidence that production hardware is going to works it will be reliable; it can be maintained and supported by the user and is not over designed.

PRIORITY RATINGS - DO AND DX — the two types of priority ratings contained in Defense Priorities System Regulation that specify rules relating to the status, placement, acceptance and treatment of priority rated contracts and orders. DO ratings have equal preferential status and take priority over all unrated orders. DX ratings have equal preferential status and take priority overall DO rated and unrated orders.

PROCESS — 1) A planned series of actions of operations which advances a material or product from one stage of completion to another, and 2) a planned and controlled treatment that subjects materials to the influence of one or more types of energy for the time required to bring about the desired reactions or results.

PROCESS COST SYSTEM — Total costs for producing a type of unit and the number produced are determined for regular accounting periods. An average unit based on that data is determined.

PROCESS LAYOUT — A method of plant layout in which the machines, equipment, and areas for performing the same or similar operations are grouped together, i.e., layout by function.

PROCESS SHEET — A document, originating in manufacturing engineering and sent to the production floor, which describes and illustrates methods and tools to be used in fabricating or assembling specific parts or subassemblies.

PRODUCIBILITY — The relative ease of producing an item or system which is governed by the characteristics and features of a design that enable economical fabrication, assembly, inspection, and testing using available production technology.

PRODUCIBILITY ENGINEERING AND PLANNING (PEP) — The production engineering tasks and production planning measures undertaken to ensure a timely and economic transition from development to the production phase of a program.

PRODUCIBILITY REVIEW — A review of the design of a specific hardware item or system to determine the relative ease of producing it using available production technology considering the elements of fabrication, assembly, inspection and test.

PRODUCTION CAPACITY REVIEW — A review of a contractor’s currently available and planned availability of production resources to determine the resources which could be committed to a proposed program and the expected facility utilization level.

PRODUCT CONFIGURATION IDENTIFICATION — The current approved technical documentation which defines the configuration of a configuration item (CI) during the production, operation, maintenance and logistic support phases of its life cycle and which prescribes that necessary for: 1) fit and function characteristics of a CI,

2) the selected functional characteristics selected for production acceptance testing, and 3) the production acceptance tests.

PRODUCT MANUFACTURING BREAKDOWN — The product manufacturing breakdown takes the product physical description and decomposes it into demands for specific types of manufacturing capability. This establishes the baseline for determination of the types of personnel and manufacturing facilities which will be required. It can also serve as the basis for establishing the time requirements for the individual manufacturing operations involved in developing the required schedule relationships.

PRODUCTION CENTER — The area containing the machine or machines operated by a worker or workers as well as the space required for the storage of materials at the machine and for loading and unloading it; auxiliary tools, benches jigs, and the like; and the free and safe movement of the worker while working which, for administrative and accounting purposes, is considered a unit.

PRODUCTION CONTROL — The procedure of planning, routing, scheduling, dispatching, and expediting the flow of materials parts, subassemblies, and assemblies within the plant from the raw state to the finished product in an orderly and efficient manner.

PRODUCTION ENGINEERING — The application of design and analysis techniques to produce a specified product. Included are the functions of planning, specifying, and coordinating the application of required resources; performing analyses of producibility and production operations, processes, and systems; applying new manufacturing methods, tooling, and equipment; controlling the introduction of engineering changes; and employing cost control techniques.

PRODUCTION EQUIPMENT MAINTENANCE — The task of inspecting, servicing, and adjusting the production equipment to achieve minimum interruption of the manufacturing flow.

PRODUCTION FEASIBILITY — The likelihood that a system design concept can be produced using existing production technology while simultaneously meeting quality, production rate, and cost requirements.

PRODUCTION FEASIBILITY REVIEW — A review of a system design concept to estimate the likelihood that the concept. can be produced using existing production technology while simultaneously meeting quality, production rate and cost requirements.

PRODUCTION LINE BALANCING — Balancing a production line means to plan its operation so that the rate of materials which flow through all the work stations is as nearly uniform as practicable.

PRODUCTION MANAGEMENT — The effective use of resources to produce on schedule the required number of end items that meet specified quality, performance, and cost. Production management includes but is not limited to industrial resource analysis, producibility assessment, producibility engineering and planning, production engineering, industrial preparedness planning, post production planning, and productivity enhancements.

PRODUCTION MANAGEMENT TECHNIQUES — The technique utilized by the contractor to plan for and determine the progress of the production program.

PRODUCTION PHASE — The period from production approval until the last system/equipment is delivered and accepted. The objective is to efficiently produce and deliver effective and supportable systems to the operating units. It includes the production and deployment of all principal and support equipment.

PRODUCTION PLAN — The production plan is the vehicle which describes the employment of the manufacturing resources to produce the required products or systems, on time, and within cost constraints.

PRODUCTION PLAN REVIEW — A review conducted to approve or disapprove a contractor prepared and submitted production plan.

PRODUCTION PLANNING — The systematic scheduling of workers, materials, and machines by using lead times, time standards, delivery dates, work loads, and similar data for the purpose of producing products efficiently and economically and meeting desired delivery dates.

PRODUCTION PLANNING AND CONTROL — The planning of operations that accomplishes coordination of workers, material, and facilities to achieve effective and efficient production goals.

PRODUCTION READINESS — The state or condition of preparedness of a system program to proceed into production. A system is ready for production when industrial resource capability completeness and producibility of the production design and the managerial and physical preparations necessary for initiating and sustaining aviable production effort have progressed to the point where a production commitment can be made without incurring unacceptable risks that thresholds of schedule, performance, cost, or other established criteria will be breached.

PRODUCTION READINESS REVIEW (PRR) — A formal examination of a program to determine whether the design is ready for production, production engineering problems have been resolved, and the producer has accomplished adequate planning for the production phase.

PRODUCTION SCHEDULES — Chronological controls used by management to regulate efficiently and economically the operational sequences of production.

PRODUCTIVITY — The relationship of the quantity and quality of products, goods and services produced to the quantity of resources (personnel, captial, facilities, machine tools and equipment, materials and information) required to produce them.

PRODUCTIVITY ENHANCEMENT — The use of contract incentives and other techniques to provide the environment, motivation and management commitment to increase production efficiencies.

PRODUCTS — All items, materiel, material, data, software, supplies, systems, assemblies, subassemblies, or portions thereof which are produced, purchased, developed or otherwise used by DOD.

PROGRAM DECISION MEMORANDUM (PDM) — A document which provides decisions of the Secretary of Defense on Program Objective Memoranda (POMs) and Joint Force Memoranda.

PROGRAM EXECUTIVE OFFICER — Officials responsible for administering a defined number of major and/or non-major acquisition programs who report to and receive direction from a Service Acquisition Executive.

PROGRAM OBJECTIVE MEMORANDUM (POM) — A memorandum in prescribed format submitted to the Secretary of Defense by the Secretary of a Military Department or the Director of a Defense Agency which recommends the total resource requirements within the parameters of the published Secretary of Defense fiscal guidance.

PROGRAM MANAGEMENT DIRECTIVE — The official management directive used to provide direction to the implementing and participating commands and satisfy documentation requirements. It will be used during the entire acquisition cycle to state requirements and request studies as well as initiate, approve, change, transition, modify or terminate programs.

PROGRAM MANAGEMENT PLAN — The document developed and issued by the program manager which shows the integrated time phased actions and resources required to complete the task specified in the program management directive.

PROGRAM MEMORANDUM — An OSD document prepared with similar format, content and coordinating as the DCP but documents program guidelines and thresholds for those significant development programs which are not subject to specific DCP action.

PROTOTYPE — An original or model on which a later item is formed or based. Usually built during Concept DEM/VAL and tested prior to the Milestone II decision.

QUALIFICATION TEST — This test simulates defined environmental conditions with a predetermined safety factor. The results of this test indicate whether a given design can perform its function within the simulated environment of a system; tests at this time are usually not made on models using production tooling and processes.

QUALITY — The composite of material attributes including performance features and characteristics of a product or service to satisfy a given need.

QUALITY ASSURANCE (QA) — A planned and systematic pattern of all actions necessary to provide confidence that adequate technical requirements are established; products and services conform to established technical requirements; and satisfactory performance is achieved.

QUALITY AUDIT — A systematic examination of the acts and decisions with respect to quality in order to independently verify or evaluate the operational requirements of the quality program or the specification or contract requirements for a product or service.

QUALITY OF CONFORMANCE — The extent to which the product or system conforms to design criteria or requirements.

QUALITY OF DESIGN — The adequacy of the product or system design to meet the needs of the user.

QUALITY PROGRAM — A program which is developed, planned, and managed to carry out, cost-effectively, all efforts to effect the quality of materiel and services from concept through validation, full-scale development, production, deployment, and disposal.

R&M ACCOUNTING — That set of mathematical tasks which establish and allocate quantitative R&M requirements, and predict and measure quantitative R&M achievements.

R&M ENGINEERING — That set of design, development, and manufacturing tasks by which R&M are achieved.

RATING FACTOR — That percentage of skill and effort and method displayed by an operator during the period of the study with 100% representing normal skill and effort.

RDT&E ACTIVITIES — Consists of all effort funded from the RDT&E appropriation regardless of program category.

RDT&E PROGRAM CATEGORIES — Consists of six divisions that the RDT&E program is divided into, namely; research, exploratory development, advanced development, engineering development, management and support, and operational system development.

REAL PROPERTY — Real property is land and rights therein, ground improvements, utility distribution systems, buildings, and structures. It excludes foundations and other work necessary for the installation of special tooling, special test equipment and plant equipment.

RELIABILITY — The duration or probability of failure free performance under stated conditions.

RELIABILITY, MISSION — The ability of an item to perform its required functions for the duration of a specified mission profile.

REALIZATION FACTOR — The ratio of actual performance time to standard performance time, usually expressed as a decimal number.

RECURRING EFFORT — An effort repeated regularly during a contract's duration.

RESEARCH — Scientific study and experimentation directed towards increasing knowledge and understanding in those fields directly related to explicitly stated long term national security needs.

REWORK — Any corrections of defective work either before, during or after inspection.

SCHEDULING — Prescribing when and where each operation necessary to the manufacture of a product is to be performed.

SCRAP — Residual material resulting from machine or assembly processes, such as machine shavings, unusable lengths of wire, faulty parts.

SCRAP PREVENTION — The program developed to assure that minimum scrap is generated during the manufacturing process.

SELECTED ACQUISITION REPORT (SAR) — A document prepared for the SECDEF by a DOD component which summarizes current estimates of technical, schedule, and cost performance in comparison with the original plans and current program.

(SERVICE) SYSTEM ACQUISITION REVIEW COUNCIL ((S)SARC) — A council established by the Head of a Military Department as an advisory body to and through the Military Department to the SECDEF on major system acquisitions. The (S)SARC is chaired by the Secretary/Under Secretary of the Military Department and is similar in functional composition, responsibilities and operation to the DAB. In application the term (Service) is replaced by the designation of the applicable Military Department, i.e., ASARC.

SETUP — Making ready or preparing for the performance of a job or operation. Machine setup involves equipping a machine with the appropriate accessories, tools, and fixtures, setting the proper feed, speed, and depth of cut, and so forth. In manual work, setup is the arrangement prior to commencing the work, of the tools, accessories, component parts, and details involved. It also includes the teardown to return the machine or work area to its original or normal condition.

SETUP TIME — The time required to arrange locating fixtures and equipment in order to begin productive work; including adjustments and take down of the original setup.

SHRINKAGE — An additional quantity of material added to the quantity listed on the Bill of Material to provide for spoilage, scrap, waste and natural attrition.

SOFTWARE FAILURE — The inability, due to a fault in the software, to perform an intended logical operation in the presence of the specified/date environment.

SOFTWARE MAINTAINABILITY — The probability that the software, can be retained in or restored to a specified status in a prescribed period compatible with mission requirements.

SOFTWARE RELIABILITY — The probability that the required software will perform the intended logical operations for the prescribed mission(s) and period(s) in the specified data/environment, without failure.

SOURCE SELECTION — The process wherein the requirements, facts, recommendations and government policy relevant to an award decision in a competitive procurement of system/project are examined and the decision made.

SPECIAL TEST EQUIPMENT (STE) — Single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in the performance of the contract. Such testing units comprise electrical, electronic, hydraulic, pneumatic, mechanical, or other items interconnected so as to become a new function entity, causing the individual item or items to become interdependent and essential in the perfor-

mance of special purpose testing in the development or production of particular supplies or services. The term "special test equipment" does not include: 1) material, 2) special tooling, 3)buildings and nonseverable structures (except foundations and similar improvements necessary for the installation of special test equipment), and 4) plant equipment items used for general plant testing purposes.

SERVICE ACQUISITION EXECUTIVE — The senior acquisition executive within each Military Department, designated by the Component Head, responsible for administering acquisition programs in accordance with DOD policies and guidelines.

SPECIAL TIME ALLOWANCE — A temporary time value applying to an operation in addition to or in place of a standard allowance in order to compensate for a specified, temporary, nonstandard production condition.

SPECIAL TOOLING (ST) — All jigs, dies, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids, and replacements thereof, which are of specialized nature that, without substantial modification or alteration, their use is limited to the development or production of particular services. The term includes all components of such items, but does not include: 1) consumable property, 2) special test equipment, and 3) buildings, nonseverable structures (except foundations and similar improvements necessary for the installation of special tooling), general or special machine tools, or similar capital items.

SPOILAGE — A form of waste material resulting from misuse of material or errors in workmanship.

STANDARD — A term applied, in work measurement, to any established or accepted rule, model, or criterion against which comparisons are made.

STANDARD COST — The normal expected cost of an operation, process, or product including labor, material, and overhead charges, computed on the basis of past performance costs, estimates, or work measurement.

STANDARD TIME — The time which is determined to be necessary fora qualified worker, working at a pace which is ordinarily used under capable supervision and experiencing normal fatigue and delays, to do a defined amount of work of specified quality when following the prescribed method.

STANDARD TIME DATA — A compilation of all the elements that are used for performing a given class of work with standard elemental time values for each element. The data is used as a basis for determining time standards on work similar to that from which the data was determined without making actual time studies.

STANDARDIZATION — The process by which various defense forces achieve the closest practicable cooperation and the most efficient use of research, development and production resources.

SUBASSEMBLY — Two or more parts joined together to form a unit which is only a part of a complete machine, structure, or other article.

SUPPORT EQUIPMENT — Includes all equipment required to perform the support function, except that which is an integral part of the mission equipment. Support equipment should be interpreted as including tools, test equipment, automatic test equipment (ATE) (when ATE is accomplishing a support function) organizational, field and depot support equipment, and related computer programs and software.

SURGE — The accelerated production, maintenance, and repair of selected items, and the expansion of logistics support services, to meet contingencies short of a declared national emergency utilizing existing facilities and equipment. Only existing peacetime program priorities will be available to obtain materials, components, and other industrial resources necessary to support accelerated program requirements; however, increased emphasis may be placed on use of these existing authorities and priorities.

SYNTHETIC TIME STANDARD — A time standard developed for an operation by utilizing predetermined

elemental time data or standard data rather than by making a time study.

SYSTEM AVAILABILITY — The probability (or proportion of operational time) that the hardware and software is in the required operable and committable state when the mission is required with a specified date/environment.

SYSTEM CAPABILITY — The probability that the hardware and software can achieve the required mission objectives given the operational conditions, including data environment, during the mission.

SYSTEM DEPENDABILITY — The probability that the hardware and software will perform successfully during one or more required sequences of a mission, given the hardware and software status at the start of the mission (availability).

SYSTEM DESIGN REVIEW (SDR) — Evaluates the optimization, correlation, completeness and risks associated with the allocated technical requirements.

SYSTEM EFFECTIVENESS — The measure of the degree to which the hardware and software achieve the mission requirements in the operational environment as evidenced in system availability, dependability and capability.

SYSTEM R&M PARAMETER — A measure of reliability or maintainability in which the units of measurement are directly related to operational readiness, mission success, maintenance manpower cost, or logistic support cost.

SYSTEM REQUIREMENT REVIEW (SRR) — Evaluates the adequacy of the contractor's efforts in defining system requirements.

TECHNICAL DATA PACKAGE — Those documents, drawings, reports, manuals, revisions, technical orders, or other submissions as set forth as a CDRL line item to be delivered as required by the contract.

TECHNOLOGY MODERNIZATION — The coupling of modernization with the implementation of advanced manufacturing technology by providing incentives for contractor (and subcontractor) capitalization.

TESTING — An element of inspection. Generally denotes the determination by technical means of the properties or elements of supplies, or components thereof, including functional operation, and involves the application of established scientific principles and procedures.

TIME PHASED ACTION PLAN — The time phased action plan represents the schedule for the employment of the manufacturing facilities, processes, and personnel necessary to meet the end item delivery date.

TIME STUDY — The procedure by which the actual elapsed time for performing an operation or subdivisions or elements thereof is determined by the use of a suitable timing device and recorded. The procedure usually but not always includes the adjustment of the actual time as the result of performance rating to derive the time which should be required to perform the task by a worker at a standard pace and following a standard method under standard conditions.

TOLERANCE — A measure of the accuracy of the dimensions of a part or the electrical characteristics of an assembly or function.

TOOL STUDY — An instrument that makes or assists in the production of fabricated parts, other tools and assemblies.

TOUCH LABOR — Defined as production labor which can be reasonably and consistently related directly to a unit of work being manufactured, processed, or tested. It involves work affecting the composition, condition, or production of a product; it may also be referred to as hands on labor or factory labor. It includes such functions as machining, welding, fabricating, painting, assembling, and functional testing of production articles.

UNAVOIDABLE DELAY — A production delay that the operator cannot prevent.

UNAVOIDABLE DELAY ALLOWANCE — Time included in the production standard to allow for time lost which is essentially outside the worker's control; as, interruption by supervision for instruction, waits for crane, or minor adjustments to machines or tools (usually applied as a percentage of the leveled, normal, or adjusted time).

VARIABLE EXPENSE — Expenditures that vary in proportion to the volume of production, such that an increase/decrease in production causes an increase/decrease in the variable cost.

VARIANCE — The difference between any standard or expected value and an actual value. For example, the difference between the established standard cost and the cost actually incurred in performing a job or operation.

WEAPON SYSTEM — Technically complex items such as aircraft, missiles, ships and tanks including not only the major item of equipment itself, but the subsystems, logistical support, software, construction and training needed to operate and support it. Sometimes used interchangeably with "defense system".

WORK AID — A device such as a pattern, template, or sketch used to enhance worker's ability to learn and perform a task efficiently.

WORK CYCLE — A pattern of motions and/or processes that is repeated with negligible variation each time an operation is performed.

WORK SAMPLING STUDY — A statistical sampling technique employed to determine the proportion of delays or other classifications of activity present in the total work cycle.